January 5, 2023

**CANADA LYNX**: There are seven Canada lynx analysis areas (LAU) within the wildlife analysis area. The LAU’s were delineated by the Forest Service. Table 4.13-1 displays the acres in each Canada lynx LAU directly and indirectly effected by each of the two action alternatives.

|  |  |  |
| --- | --- | --- |
| **Table 4.13-1 Direct and Indirect Impacts on Canada Lynx Habitat LAU**  | **Directly Impacted Modeled Habitat (acres)**  | **Indirectly Impacted Modeled Habitat (acres)**  |
| **2021 MMP**  | **2021 MMP**  | **2021 MMP**  |
| Stibnite  | 80  | 20,634  |
| Yellowpine  | 39  | 9,107  |
| Burntlog  | 61  | 15,507  |
| Warm Lake  | 2  | 1,652  |
| Landmark  | 3  | 5,736  |
| East Mountain  | 9  | 15,969  |
| West Mountain  | 0  | 2,140  |
| **Tota**l  | **194**  | **70,745**  |
| **Johnson Creek Route Alternative**  | **Johnson Creek Route Alternative**  | **Johnson Creek Route Alternative**  |
| Stibnite  | 80  | 20,649  |
| Yellowpine  | 9  | 9,101  |
| Burntlog  | 69  | 15,494  |
| Warm Lake  | 2  | 1,652  |
| Landmark  | 6  | 5,647  |
| East Mountain  | 9  | 15,969  |
| West Mountain  | 0  | 2,140  |
| **Total**  | **175**  | **70,650**  |

Although the number of acres directly impacted is quite low, the Forest Service analysis states the mine activities “would affect, but not adversely affect, Canada lynx utilizing the area or their habitat.” At the time the SDEIS was released informal Section 7 consultation with the USFWS was ongoing. “Therefore, based on the impact analysis for the Canada lynx and its habitat, the 2021MMP would result primarily in localized, long-term, and permanent, minor impacts to the Canada lynx.”

The impacts identified in the SDEIS will be offset through restoration projects during the reclamation process for both action alternatives. However, the impacts of the Johnson Creek alternative will be less because of its smaller footprint.

The following is a quote from the Idaho Department of Fish and Game’s draft *Management Plan for the Conservation of Fisher, Wolverine, and Canada Lynx in Idaho, 2023-2028*: “Idaho’s potential role in lynx conservation is more narrow, given the limited availability of suitable habitat in our state.” In addition, Figure 8 documents low to middle habitat in the study area.

The proposed project will have no noticeable impact to the overall Canada lynx population in Idaho.

**FISHER:** There are 17,711 acres of ‘modeled source habitat’ acres for the fisher in the wildlife analysis area. The following is the definition of modeled source habitat: “In this model, organisms occupy two patches of habitat. One patch, the source, is a high-quality habitat that on average allows the population to increase. The second patch, the sink, is very low-quality habitat that, on its own, would not be able to support a population.”

The fisher doesn’t have the ability to negotiate deep snow that Canada lynx and wolverine have. Thus, they struggle in deep snow, noncompacted snow conditions; they normally occupy habitat below 5,000 feet elevation. The mine site is predominately above 6,000 feet elevation, including the access routes.

To better understand fisher distribution the Payette and Boise national forests enhanced survey efforts as part of a state monitoring program in 2018-2019. Figure 1 and 2 in the Idaho Department of Fish and Game’s draft *Management Plan for the Conservation of Fisher, Wolverine, and Canada Lynx in Idaho, 2023-2028* displays fisher observation records in Idaho, 1960-2022, plus a state-wide fisher habitat rating. This data documents few fisher observations in the project area, plus no habitat.

The SDEIS has the following statement: “On the PNF, incidental trapping continues to be a mortality issue for fisher.” Figure 3 in the Idaho Department of Fish and Game’s draft *Management Plan for the Conservation of Fisher, Wolverine, and Canada Lynx in Idaho, 2023-2028* displays fisher incidental records, 2000-2022. The 5-year average fisher morality from incidental catch is five per year and occurs in the Panhandle and Clearwater regions. Give the low incidence fisher records, plus lack of habitat, the incidental catch is not a significant issue.

The proposed project will have no noticeable impact to the overall fisher population in Idaho.

**WOLVERINE**: For the SDEIS, the wolverine is considered ‘proposed for listing’ or proposed-threatened as per the USFWS proposed 2013 proposed rule. Wolverines are well documented within and adjacent to the project area. Accordingly, the Forest Service has: “preliminarily determined that the 2021 MMP may directly and indirectly impact wolverine individuals and habitat resulting in adverse impacts but would not jeopardize the continued existence of the species.” Consequently, informal Section 7 ESA is ongoing with the USFWS. In analyzing the action alternatives impacts to wolverine habitat is more extensive in 2021MMP due to reducing habitat connectivity, high level of displacement, plus the highest indirect impacts. It was concluded “…based on the impact analysis for the wolverine and its habitat, the 2021 MMP would result in localized and long-term impacts to the wolverine, particularly the local population (part of larger Central Idaho sub-populations).”

The analysis area is located in Tier 1 Game Management Units (GMUS) 25 and 26 per the Management Plan for Conservation of Wolverines in Idaho, 2014-2019 (IDFG). Tier 1 units are the most important based on potential use threats and unprotected habitat. Unfortunately, although there are estimates for population carrying capacity in Idaho, there is currently no valid population estimate (IDFG 2014). For your information, GMU 25 encompasses the entire South Fork Salmon River drainage. GMU 26 encompasses the entire Big Creek drainage, a tributary of the Middle Fork of the Salmon River.

The SDEIS evaluated the direct and indirect effects to wolverine within a 5-mile buffer of the 2021 MMP alternative, assessing all potential impacts, including noise disturbance. The buffer was established using best professional judgment, plus the USFWS, to address potential indirect impacts.

Direct and indirect impacts to wolverine habitat are displayed in Table 4.13-2.for both action alternatives.

|  |  |  |
| --- | --- | --- |
| **Persistent Spring Snow Cover Years**  | **Directly Impacted Habitat (acres)**  | **Indirectly Impacted Habitat (acres)**  |
| **2021 MMP**  | **2021 MMP**  | **2021 MMP**  |
| 1-4  | 2,149  | 245,018  |
| 5-7  | 193  | 97,922  |
| **Johnson Creek Route Alternative**  | **Johnson Creek Route Alternative**  | **Johnson Creek Route Alternative**  |
| 1-4  | 1,915  | 228,945  |
| 5-7  | 90  | 74,171  |

Figures 4,5 and 6 (draft *Management Plan for the Conservation of Fisher, Wolverine, and Canada Lynx in Idaho, 2023-2028)* display modeled wolverine habitat in the western states, the estimated probability of occupancy in Idaho, plus wolverine observations in Idaho, 1890-2022.

Given the large home range documented for wolverines, plus the restricted area of the proposed project, logic suggests although there will be direct and indirect impacts negative to the wolverine and its habitats, the proposed project will have little to no impact to the Central Idaho sub-population as a whole. Especially given the location of the proposed project as immediate areas to the north, south and east are predominately designated wilderness and/or undeveloped.

 Bottom line: from a wildlife perspective, the project will have basically no impact on Canada lynx and the fisher. The wolverine is of more concern, however, given the abundance of wolverine habitat adjacent to the project area there will be no population-level issue.